

ART 34 AMDT  
050/50574

We claim:

## 1. Ink-jet inks comprising

5

- A) at least one dispersed (A1) or dissolved (A2) colorant,
- B) a dispersant in the case of a colorant (A1),
- 10 C) a low molecular weight polytetrahydrofuran (C1), if desired in mixture with one or more high-boiling water-soluble or -miscible organic solvents (C2), and
- D) water

15

as essential constituents.

## 2. Ink-jet inks as claimed in claim 1, including, in each case based on the weight of the preparation,

20

from 0.01 to 20% by weight of said component (A),

25

from 0.01 to 20% by weight of said component (B) if the colorant is present in an essentially undissolved state,

from 0.1 to 40% by weight of said component (C), and

not less than 50% by weight of said component (D).

30 3.

*Sub A1*

Ink-jet inks as claimed in claim 1 or 2, including as component (C1) one or more polytetrahydrofurans having an average molecular weight  $M_w$  of from 150 to 500 g/mol.

35 4.

Ink-jet inks as claimed in any of claims 1 to 3, including from 1 to 10% by weight of said component (C1) and from 1 to 30% by weight of said component (C2).

40 5.

Ink-jet inks as claimed in any of claims 1 to 4, including as component (C2) one or more solvents selected from the group consisting of polyhydric alcohols, polyethylene glycols, polypropylene glycols, polyethylene glycol monoalkyl ethers, polypropylene glycol monoalkyl ethers, pyrrolidone and N-alkylpyrrolidones.

45 6.

Ink-jet inks as claimed in any of claims 1 to 5, including as component (C2), in each case based on the weight of the ink, from 1 to 10% by weight of glycerol, sorbitol and/or

Sub A1  
cont.

5 propylene glycol, from 1 to 10% by weight of polyethylene glycol having an average molecular weight  $M_w$  of from 300 to 500 g/mol and from 1 to 10% by weight of di- and/or triethylene glycol mono- $C_1-C_4$ -alkyl ether.

7. Ink-jet inks as claimed in any of claims 1 to 6, including as component (A) a finely divided organic or inorganic pigment.

8. Ink-jet inks as claimed in any of claims 1 to 7, including as component (B) a dispersant based on arylsulfonic acid-formaldehyde condensation products (B1), on alkoxyLATED phenols (B2) on condensation products of an at least difunctional isocyanate with compounds (B3) each bearing one isocyanate-reactive group, on alkoxyLATED hydroxynaphthalenes (B4) or on alkoxylation products of at least difunctional aliphatic or aromatic amines having up to 8 carbon atoms (B5).

9. Ink-jet inks as claimed in any of claims 1 to 8, further comprising urea and a polyether siloxane copolymer.

10. Ink-jet inks as claimed in any of claims 1 to 9, further comprising a thermally or radiation-chemically curable binder.

11. A process for printing sheetlike or three-dimensionally configured substrates by the ink-jet process, which comprises printing inks as set forth in any of claims 1 to 10 onto the substrate and, if desired, subsequently fixing the print obtained.

35

40

45